

From: [R4SampleCustody](#)
To: [Amoroso, Cathy](#)
Cc: [R4SampleCustody](#); [Turner, Nardina](#); [Sandra.Harrigan@ttemi.com](#); [jessica.vickers@ttemi.com](#); [Saskowski, Ronald](#); [Hendel, Jeffrey](#); [Aker, Sandra](#)
Subject: R4 LIMS Sample Log for Project 20-0055, WorkOrder E194902
Date: Thursday, December 5, 2019 10:46:47 PM
Attachments: [E194902_WKO_12_05_19_1426.pdf](#)
[E194902_COC_01.pdf](#)
[E194902_COC_02.pdf](#)
[E194902_COC_03.pdf](#)

Attached is a detailed work order report, in Adobe Acrobat PDF format, containing information about samples and their scheduled analyses for the following Project:

Project Number: 20-0055

Project Name: Patterson Street Solvent Plume

City: Greensboro **County:** Guilford **State:** NC

Samples in the following categories have been submitted for analysis:

Volatile Organics (VOA)

Please review the attached report and notify our Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov if you have any questions, concerns, or if you notice any errors.

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WORK ORDER

Printed: 12/5/2019 2:26:39PM

E194902

US-EPA, Region 4, LSASD

Client: Superfund Remedial (302DD2, 303DD2, 000DD2)
Project: Patterson Street Solvent Plume - CAMOROSO

Project Number: 20-0055
Acct # / Location: 000DD2B48ULA00 Greensboro Guilford NC

Project Leader: Amoroso, Cathy

Date Due: 01/09/20 (35 day TAT)

Received By: Beall, Mike

Date Received: 12/05/19 11:10

Logged In By: Beall, Mike

Date Logged In: 12/05/19 12:36

Samples Received at: 1.8°C

Placed in Cooler after Ice Removed:

D.A.R.T. Project ID: 20-0055

Custody Seals:

Sample Containers Intact: Yes

Program/Activity: SI

Custody Seals Intact:

Samples & COC Match: Yes

Site/Waterbody: PATTERSON STREET SOLVENT PLUME
(NCN000404887)

COC Present: Yes

COC/Labels Agree:

Ice in Cooler: Yes

All Analyses on COC: Yes

Analysis	Due	TAT	Expires	Comments
E194902-01 PSP-TB-04 / [Water / Trip Blank - Water] Sampled 12/03/19 10:00				
<i>A = 40mL Clear Vial B = 40mL Clear Vial C = 40mL Clear Vial</i>				
VOA Scan (Routine)	01/09/20 00:00	35	12/17/19 10:00	
E194902-02 PSP14-AA / PSP14 [Air / Ambient Air] Sampled 12/04/19 10:03				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 10:03	
E194902-03 PSP14-CS / PSP14 [Air / Crawlspace Air] Sampled 12/04/19 10:03				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 10:03	
E194902-04 PSP14-IA / PSP14 [Air / Indoor Air] Sampled 12/04/19 10:02				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 10:02	
E194902-05 PSP20-AA / PSP20 [Air / Ambient Air] Sampled 12/04/19 08:04				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 08:04	
E194902-06 PSP20-AA-DUP / PSP20 [Air / Ambient Air] Sampled 12/04/19 08:04				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 08:04	
E194902-07 PSP20-CS / PSP20 [Air / Crawlspace Air] Sampled 12/04/19 08:04				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 08:04	
E194902-08 PSP20-IA / PSP20 [Air / Indoor Air] Sampled 12/04/19 08:00				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 08:00	
E194902-09 PSP22-AA / PSP22 [Air / Ambient Air] Sampled 12/04/19 10:05				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 10:05	
E194902-10 PSP25-AA / PSP25 [Air / Ambient Air] Sampled 12/04/19 11:04				
<i>A = Passivated Air Canister</i>				
VOA Air Scan VA1 (ug/m3)	01/09/20 00:00	35	01/03/20 11:04	

E194902

US-EPA, Region 4, LSASD

Client: Superfund Remedial (302DD2, 303DD2, 000DD2)
 Project: Patterson Street Solvent Plume - CAMOROSO

Project Number: 20-0055
 Acct #: Location: 000DD2B48ULA00 Greensboro Guilford NC

Analysis	Due	TAT	Expires	Comments
E194902-11 PSP25-CS / PSP25 [Air / Crawlspace Air] Sampled 12/04/19 11:03				
A = Passivated Air Cluster				
VOA Air Scan VA1 (ug m3)	01 09 20 00:00	35	01 03 20 11:03	
E194902-12 PSP26-CS / PSP26 [Air / Crawlspace Air] Sampled 12/04/19 13:03				
A = Passivated Air Cluster				
VOA Air Scan VA1 (ug m3)	01 09 20 00:00	35	01 03 20 13:03	
E194902-13 PSP29-AA / PSP29 [Air / Ambient Air] Sampled 12/04/19 18:21				
A = Passivated Air Cluster				
VOA Air Scan VA1 (ug m3)	01 09 20 00:00	35	01 03 20 18:21	
E194902-14 PSP29-CS / PSP29 [Air / Crawlspace Air] Sampled 12/04/19 18:20				
A = Passivated Air Cluster				
VOA Air Scan VA1 (ug m3)	01 09 20 00:00	35	01 03 20 18:20	
E194902-15 PSP30-CS / PSP30 [Air / Crawlspace Air] Sampled 12/04/19 11:05				
A = Passivated Air Cluster				
VOA Air Scan VA1 (ug m3)	01 09 20 00:00	35	01 03 20 11:05	
E194902-16 PSP31-SW / PSP31 [Water / Surface Water] Sampled 12/03/19 09:20				
A = 40mL Off-air Vial E = 40mL Off-air Vial G = 40mL Off-air Vial D = 40mL Off-air Vial F = 40mL Off-air Vial H = 40mL Off-air Vial I = 40mL Off-air Vial J = 40mL Off-air Vial				
VOA Scan (Routine)	01 09 20 00:00	35	12 17 19 09:20	
E194902-17 PSP32-SW / PSP32 [Water / Surface Water] Sampled 12/03/19 09:07				
A = 40mL Off-air Vial E = 40mL Off-air Vial G = 40mL Off-air Vial				
VOA Scan (Routine)	01 09 20 00:00	35	12 17 19 09:07	

Analysis packages included in this work order

VOA Scan (Routine)

v VOA TICS-2

v VOA Scan-2

USEPA CLP Generic COC (REGION COPY)

DateShipped: 12/5/2019

CarrierName: Courier

CHAIN OF CUSTODY RECORD

Patterson Street Solvent Plume/NC

Project Code: 20-0055

No: 4-120519-090149-0005

Lab: US EPA Region 4 Laboratory

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

	Sample Identifier	CLP Sample No.	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
-16	PSP31-SW		Surface Water/ START	Grab	VOCs	A (HCl) (9)	PSP31	12/03/2019 09:20 ✓	Field Sample
-17	PSP32-SW		Surface Water/ START	Grab	VOCs	A (HCl) (3)	PSP32	12/03/2019 09:07 ✓	Field Sample
-01	PSP-TB-04		Trip Blank Water/ START	Grab	VOCs	A (HCl) (3)	#R4DART#	12/03/2019 10:00	Trip Blank
-12	PSP26-CS	20652	Crawl Space ✓ Air/ START	Grab	VOA-Air	A (None) (1)	PSP26	12/04/2019 13:03	Field Sample
-15	PSP30-CS	20653	Crawl Space ✓ Air/ START	Grab	VOA-Air	A (None) (1)	PSP30	12/04/2019 11:05 ✓	Field Sample
-07	PSP20-CS	20715	Crawl Space ✓ Air/ START	Grab	VOA-Air	A (None) (1)	PSP20	12/04/2019 08:04	Field Sample
-13	PSP29-AA	20980	Ambient Air/ ✓ START	Grab	VOA-Air	A (None) (1)	PSP29	12/04/2019 18:21	Field Sample
-04	PSP14-IA	27709	Indoor Air/ ✓ START	Grab	VOA-Air	A (None) (1)	PSP14	12/04/2019 10:02	Field Sample
-10	PSP25-AA	27710	Ambient Air/ ✓ START	Grab	VOA-Air	A (None) (1)	PSP25	12/04/2019 11:04	Field Sample
-11	PSP25-CS	27711	Crawl Space ✓ Air/ START	Grab	VOA-Air	A (None) (1)	PSP25	12/04/2019 11:03	Field Sample

Sample(s) to be used for Lab QC: PSP31-SW Tag A - Special Instructions: Analyze for 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, PCE, and vinyl chloride only.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: VOCs=(VOA) Volatile Organic Compounds, VOA-Air=(VOA) Air Scan

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
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REVISED COC 12/5/19 Ambeall - CORRECTED COLLECTION TIMES AND DETAILED
REPORT MATRIX FOR AIR SAMPLES

Lab Phone: 706-355-8856

-03

REVISED COC 12/5/19 RMBall - CORRECTED COLLECTION TIMES AND DETAILED REPORT MATRIX FOR AIR SAMPLES

E194902

Beall, Mike

From: Kelley, Quinn <quinn.kelley@tetrattech.com>
Sent: Thursday, December 05, 2019 2:08 PM
To: Beall, Mike
Subject: RE: Project 20-0055 Patterson St Solvent Plume - Sample Delivery

* CS = Crawl space air
* AA = Ambient air
* IA = Indoor air
* SG = Soil gas

Quinn Kelley
Senior Environmental Scientist
Tetra Tech, Inc.
(678) 775-3101 office
(678) 775-3138 fax

From: Beall, Mike <Beall.Mike@epa.gov>
Sent: Thursday, December 05, 2019 2:05 PM
To: Kelley, Quinn <quinn.kelley@tetrattech.com>
Subject: RE: Project 20-0055 Patterson St Solvent Plume - Sample Delivery

⚠ CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Thanks for collection time clarification.

As for report matrix codes: the sample ID's have CS, AA, IA for this project and the earlier project (19-0323) had a SG as well. If you can define these in an email, it would spare us having to use a Revised COC.

I see you have another email, so this may be moot.

Thanks,
Mike

From: Kelley, Quinn <quinn.kelley@tetrattech.com>
Sent: Thursday, December 05, 2019 2:01 PM
To: Beall, Mike <Beall.Mike@epa.gov>
Subject: RE: Project 20-0055 Patterson St Solvent Plume - Sample Delivery

* The labels are correct. I'm going to send out an updated COC and XML with the correct times and more detailed matrix codes. Let me know if there's anything else you need.

Thanks,
Quinn

Quinn Kelley
Senior Environmental Scientist
Tetra Tech, Inc.
(678) 775-3101 office
(678) 775-3138 fax

From: Beall, Mike <Beall.Mike@epa.gov>
Sent: Thursday, December 05, 2019 12:35 PM

To: Kelley, Quinn <quinn.kelley@tetrattech.com>

Subject: RE: Project 20-0055 Patterson St Solvent Plume - Sample Delivery

E194902

⚠ CAUTION: This email originated from an external sender. Verify the source before opening links or attachments. ⚠

Hi Quinn,

Amber dropped off samples and I forgot to empty the cooler and return to her. Can you send a pdf of an airbill so I can return the cooler?

We have a few collection times that differ between COC and labels: 1 air and 2 waters

Sample **PSP30-CS**: COC has a collection time of 18:20 but label has 11:05. Which is correct?

Sample **PSP31-SW**: COC has a collection time of 09:00 but labels have 09:20. Which is correct?

Sample **PSP32-SW**: COC has a collection time of 09:20 but labels have 09:07. Which is correct?

Answering this email will be sufficient and a revised COC should not be needed.

Thanks,

Mike Beall

Sample Custodian

Laboratory Services Branch

Laboratory Services and Applied Science Division

US EPA Region 4 - Athens, GA

706/355-8655

Beall.Mike@epa.gov

From: Kelley, Quinn <quinn.kelley@tetrattech.com>

Sent: Thursday, December 05, 2019 10:41 AM

To: R4SampleCustody <R4SampleCustody@epa.gov>

Cc: R4DART <R4DART@epa.gov>; Beall, Mike <Beall.Mike@epa.gov>; Turner, Nardina <Turner.Nardina@epa.gov>; Amoroso, Cathy <Amoroso.Cathy@epa.gov>; Jessica Vickers <Jessica.Vickers@tetrattech.com>

Subject: Project 20-0055 Patterson St Solvent Plume - Sample Delivery

Tetra Tech is delivering all of the samples for Project 20-0055 to the Region 4 laboratory today. Attached are the COC and XML files. This project is complete.

Thanks,

Quinn Kelley

Senior Environmental Scientist

Tetra Tech, Inc.

(678) 775-3101 office

(678) 775-3138 fax

E194902

USEPA CLP Generic COC (REGION COPY)

DateShipped: 12/5/2019

CarrierName: Courier

CHAIN OF CUSTODY RECORD

Patterson Street Solvent Plume/NC

Project Code: 20-0055

No: 4-120519-090149-0005

Lab: US EPA Region 4 Laboratory

Lab Contact: Mike Beall

Lab Phone: 706-355-8856

	Sample Identifier	CLP	Matrix/Sampler	Coll. Method	Analysis/Turnaround (Days)	Tag/Preservative/Bottles	Location	Collection Date/Time	Sample Type
		Sample No.							
-16	PSP31-SW		Surface Water/ START	Grab	VOCs	A (HCl) (9) ✓	PSP31	12/03/2019 09:00	Field Sample
-17	PSP32-SW		Surface Water/ START	Grab	VOCs	A (HCl) (3) ✓	PSP32	12/03/2019 09:20 ✓	Field Sample
-01	PSP-TB-04		Blank/	Grab	VOCs	A (HCl) (3) ✓	#R4DART#	12/03/2019 10:00	Trip Blank
-12	PSP26-CS	20652 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP26	12/04/2019 13:03	Field Sample
-15	PSP30-CS	20653 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP30	12/04/2019 18:20	Field Sample
-07	PSP20-CS	20715 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP20	12/04/2019 08:04	Field Sample
-13	PSP29-AA	20980 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP29	12/04/2019 18:21	Field Sample
-04	PSP14-IA	27709 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP14	12/04/2019 10:02	Field Sample
-10	PSP25-AA	27710 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP25	12/04/2019 11:04	Field Sample
-11	PSP25-CS	27711 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP25	12/04/2019 11:03	Field Sample
-08	PSP20-IA	27713 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP20	12/04/2019 08:00	Field Sample
-02	PSP14-AA	27714 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP14	12/04/2019 10:03	Field Sample
-05	PSP20-AA	27715 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP20	12/04/2019 08:04	Field Sample
-06	PSP20-AA-DUP	27816 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP20	12/04/2019 08:04	Field Sample
-09	PSP22-AA	27817 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP22	12/04/2019 10:05	Field Sample
-14	PSP29-CS	27826 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP29	12/04/2019 18:20	Field Sample
-03	PSP14-CS	27827 ✓	Air/ START	Grab	VOA-Air	A (None) (1) ✓	PSP14	12/04/2019 10:03	Field Sample

Sample(s) to be used for Lab QC: PSP31-SW Tag A - Special Instructions: Analyze for 1,1-DCE, cis-1,2-DCE, trans-1,2-DCE, TCE, PCE, and vinyl chloride only.

Shipment for Case Complete? Y

Samples Transferred From Chain of Custody #

Analysis Key: VOCs=(VOA) Volatile Organic Compounds, VOA-Air=(VOA) Air Scan

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
	Ambler Talkner / Tt	12/5/2019 11:00	RnBeall EPA LSASD LSB	12-5-19 1110	Good